

METHODS AND DEVICES FOR REDUCING  
INTEGRATED CIRCUIT POWER CONSUMPTION IN IMPLANTABLE  
CARDIAC STIMULATION DEVICES

ABSTRACT OF THE DISCLOSURE

A voltage step-down circuit reduces the amount of power drawn from the battery of an implantable cardiac stimulation device (ICD) to supply an integrated circuit (IC) within the ICD. The ICD battery supply voltage is reduced to a level that maintains proper operation of the IC. The reduced battery supply voltage is also regulated such that the IC is supplied with a constant voltage source. The IC consumes less power when supplied by the reduced battery supply voltage than when supplied directly by the battery supply voltage. The present invention promotes ICD battery longevity and reduces the need for frequent ICD battery replacements.

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